

**AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) ~~Method for the humanization of~~ A method for humanizing the VH and VL variable regions of an animal antibody of known sequence, comprising the steps of:
    - a) ~~if not available~~, obtaining the crystallographic structure of the VH and VL regions of the animal antibody;
    - b) pre-selecting a series of 0 to n possible frameworks acceptors of human origin or humanized antibodies, whose structure was determined experimentally with a resolution of no less than 3 Å, based on the highest level of homology and identity with the primary sequence of the framework of the animal antibody;
    - c) conducting a structural comparison between the VH and VL variable regions of the animal antibody and the regions VH and VL obtained in b), respectively and calculating for each comparison the RMS, to identify the region VH and the region VL of human origin with the smaller RMS; and
    - d) inserting in appropriate position the sequences of the regions CDR of the animal antibody in the human sequences identified in c);
    - e) ~~if necessary, retromutate one or more amino acid residues of the human VH and VL regions identified in c).~~
  2. (Currently Amended) ~~Method as claimed in~~ The method of claim 1, wherein the modifications of the antibody take place with recombining DNA techniques.
- Claims 3-7 (Canceled)
8. (Currently Amended) A humanized anti-NGF antibody ~~humanized animal antibody obtainable according to the method as claimed in any one of the previous claims comprising a~~ VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having

the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

9. **(Currently Amended)** A humanized anti-TrkA antibody ~~humanized animal antibody~~ obtainable according to the method as claimed in claims 5 or 6, comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.

10. **(New)** An immunotoxin comprising a cytotoxic agent bound to a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.

11. **(New)** A method for treating inflammation in a subject by administering a humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

12. **(New)** A method for treating pain in a subject by administering a humanized anti-NGF antibody humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

13. **(New)** A method for treating a tumor in a subject by administering a humanized anti-NGF antibody humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

14. **(New)** A method for treating an HIV induced pathology in a subject by administering a humanized anti-NGF antibody humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid

sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

15. (New) A method for treating inflammation in a subject by administering a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.

16. (New) A method for treating pain in a subject by administering a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.

17. (New) A method for treating a tumor in a subject by administering a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.

18. (New) A polynucleotide encoding a humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

19. (New) A polynucleotide encoding a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.

20. (New) A transgenic animal expressing a humanized anti-NGF antibody humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.

21. (New) A transgenic animal expressing a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.
22. (New) A cell expressing a humanized anti-NGF antibody humanized anti-NGF antibody comprising a VH region having the amino acid sequence set forth in SEQ ID NO:17 and a VL region having the amino acid sequence set forth in SEQ ID NO: 18, or a fragment thereof which maintains NGF binding activity.
23. (New) A cell expressing a humanized anti-TrkA antibody comprising a VH region having the amino acid sequence set forth in SEQ ID No. 37, and a VL region having the amino acid sequence set forth in SEQ ID No. 38, or a fragment thereof which maintains TrkA binding activity.
24. (New) The method of claim 1, further comprising retromutating one or more amino acid residues of the human VH and VL regions identified in (c).